Accelerating Innovation With Generative AI: AI-Augmented Digital Prototyping and Innovation Methods

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Abstract

Easy-to-use generative artificial intelligence (AI) is democratizing the use of AI in innovation management and may significantly change the way how we work and innovate. In this article, we show how large language models (LLMs), such as generative pretrained transformer (GPT), can augment the early phases of innovation, in particular, exploration, ideation, and digital prototyping. Drawing on six months of experimenting with LLMs in internal and client innovation projects, we share first-hand experiences and concrete examples of AI-assisted approaches. The article highlights a large variety of use cases for generative AI ranging from user journey mapping to idea generation and prototyping and foreshadows the promising role LLMs may play in future knowledge management systems. Moreover, we argue that generative AI may become a game changer in early prototyping as the delegation of tasks to an artificial agent can result in faster iterations and reduced costs. Our experiences also provide insights into how human innovation teams purposively and effectively interact with AIs and integrate them into their workflows.